What Is Claimed Is:

1. A pattern inspection method, comprising the steps of:

irradiating either a charged particle or a light on a surface of a substrate on which a pattern is formed;

obtaining an image of said substrate surface by detecting one of a reflected light, secondary electron, reflected electron, transmitted electron, or absorbed electron generated from said substrate as a result of the irradiation;

producing a digital image by subjecting the produced image signal to A/D conversion;

comparing the digital image with a reference image stored in a memory, and extracting a defect candidate; and

outputting information of the extracted defect candidate including image of the extracted defect candidate.

2. The pattern inspection method according to Claim 1, further comprising the step of displaying the outputted image of the extracted defect candidate on a display screen.

3. The pattern inspection method according to Claim 1, wherein said information outputted at the outputting step includes data enabling the classification of the defect.

4. The pattern inspection method according to Claim 1, further comprising the step of displaying in a map format the defect candidate outputted at the step of outputting.

5. The pattern inspection method according to Claim 4, further comprising the step of displaying an image of a defect candidate designated in the map displayed on the screen.

6. A pattern inspection method, comprising the steps of:

detecting a defect candidate of a pattern by using an inspecting means;

outputting an image of this detected defect candidate and data including location information of the defect candidate via either a storage medium or a network; and

inputting said defect candidate image and data including location information of the defect candidate outputted via either said storage medium or said network to processing means, and displaying the same on a screen of the processing means.

7. The pattern inspection method according to Claim 6, wherein the defect candidate location data is displayed in map format on said screen.

8. The pattern inspection method according to Claim 6, wherein an image of the defect candidate is displayed on said screen.

9. The pattern inspection method according to Claim 8, wherein the defect candidate, whose image is displayed on said screen, is designated on this screen.

10. The pattern inspection method according to Claim 6, further comprising the step of changing threshold value data on said screen, when detecting a defect candidate of said pattern using said inspecting means.

11. The pattern inspection method according to Claim 10, wherein defect candidate location data displayed in map format is updated and displayed in accordance with said changed threshold value data.

12. The pattern inspection method according to Claim 6, wherein, in said step for displaying on the screen, said defect candidates are classified using the images of defect candidates outputted via either said storage medium or network and data comprising the locations of these defect candidates, and location data of these classified defect candidates is identified by classification and displayed in map format on said screen.

13. The pattern inspection method according to Claim 6, wherein, in said step for displaying on the screen, said

defect candidates are classified using the images of defect candidates outputted via either said storage medium or network and data comprising the locations of these defect candidates, and location data of the designated defect candidate from among these classified defect candidates is displayed in map format on said screen.

14. The pattern inspection method according to Claim 13, wherein location data of defect candidates of a plurality of classifications designated from among said classified defect candidates is identified by said classifications and displayed in map format on said screen.

15. The pattern inspection method according to Claim 13, further comprising the steps of processing said inputted image of said defect candidate and data comprising the location of this defect candidate by said processing means, and thereafter outputting [same] via said network.

16. A pattern inspection method, comprising the steps of:

imaging a substrate on which a pattern is formed;

processing an image obtained by said imaging to detect a defect candidate of said pattern;

outputting, via a network, an image of said detected defect candidate and data including location information of the defect candidate while carrying out the

step of imaging said substrate and the step of detecting a defect candidate of said pattern; and

displaying, on a screen, said defect candidate image and data including the location information of the defect candidate outputted via this network.

17. The pattern inspection method according to Claim 16, wherein data of the location information of the defect candidate is displayed in map format on said screen.

18. The pattern inspection method according to Claim 16, wherein an image of the defect candidate is displayed on said screen.

19. The pattern inspection method according to Claim 18, wherein the defect candidate, whose image is displayed on said screen, is designated on the screen.

20. The pattern inspection method according to Claim 16, further comprising the step of changing threshold value data for detecting a defect candidate of said pattern on said screen.

21. The pattern inspection method according to Claim 16, wherein the location of the defect candidate displayed in map format is updated and displayed in accordance with said changed threshold value data.

22. The pattern inspection method according to Claim 16, wherein, in the step for displaying on said screen,

said defect candidates are classified using the images of defect candidates and data including location information of the defect candidates outputted via either said storage medium or network, and identically classified defect candidates are displayed in map format on said screen.

23. The pattern inspection method according to Claim 16, wherein, in the step of displaying on said screen, said defect candidates are classified using the images of defect candidates and data including location information of the defect candidates outputted via either said storage medium or network, and defect candidate location data designated from among the classified defect candidates is displayed in map format on said screen.

24. The pattern inspection method according to Claim 23, wherein plural classes of defect candidates designated from among said classified defect candidates are displayed on said screen discriminately from each other in the map format.